

CLAIMS

What is claimed is:

1. A method of wirelessly communicating a message from a sender to a recipient in a local environment, comprising the steps of:

positioning an information beacon in the local environment, said information beacon having a memory and a transceiver and being capable of transmitting messages in an operating region associated with said beacon;

wirelessly transmitting the message from the sender to said beacon;

storing the message in memory in said beacon;

detecting the presence of a recipient device when the recipient device is located in the operating region of said beacon; and

wirelessly transmitting the message from said beacon to the recipient device.

2. The method of claim 1, further comprising the step of encrypting the message prior to storing the message in said beacon memory, and decrypting the message after the message is received by the recipient device.

3. The method of claim 1, wherein said detecting step further comprises the step of transmitting a command from the recipient device to said beacon to transmit the stored message to the recipient device.

4. The method of claim 1, wherein said beacon and the recipient device employ Bluetooth technology.

5. The method of claim 1, wherein the recipient device has an assigned unique address code and wherein said detecting step comprises detecting the unique address code.

6. The method of claim 5, further comprising the step of designating the message with the address code of the recipient device.

7. The method of claim 1, further comprising the step of assigning a time period to the message during which the message will be transmittable from said beacon to the recipient device.

8. The method of claim 7, further comprising the step of deleting the message from said beacon after the time period expires.

9. The method of claim 8, further comprising the step of deleting the message from said beacon after the message is transmitted to the recipient device.

10. The method of claim 3, wherein said step of wirelessly transmitting the message from the sender to said beacon further comprises the steps of wirelessly transmitting a

plurality of messages having topic categories, and wherein said step of transmitting a command from the recipient device to said beacon further comprises the step of selecting specific categories of messages for transmission by said beacon to the recipient device.

11. The method of claim 1, wherein said recipient device is a mobile phone.

12. A method of communicating a message from a sender device to a recipient device in a wireless local area network having a plurality of wireless beacons in communication with each other and a host, with each beacon containing a memory, and a transceiver, and being operable in a corresponding operating region, comprising the steps of:

wirelessly transmitting a message from the sender device to a specific one of said plurality of beacons currently serving the sender device;

storing the message received by said specific one of the plural beacons in a memory;

detecting the presence of the recipient device when the recipient device enters the operating range of a particular one of said plural beacons currently serving the recipient device;

retrieving the stored message by said particular beacon; and

wirelessly transmitting the retrieved message from said particular beacon to the recipient device.

13. The method of claim 12, wherein said step of wirelessly transmitting the message to said specific one beacon comprises the step of transmitting the message to a second beacon in communication with said specific one beacon, and forwarding the message from said second beacon to said specific one beacon.

14. The method of claim 13, wherein said step of storing the message comprises storing the message in the memory of said second beacon.

15. The method of claim 12, further comprising the step of encrypting the message prior to storing the message in memory, and decrypting the message after the message is received by the recipient device.

16. The method of claim 12, wherein said detecting step further comprises the step of transmitting a command from the recipient device to said particular beacon to transmit the stored message to the recipient device.

17. The method of claim 12, wherein said plurality of transceiver beacons and the recipient device employ Bluetooth technology.

18. The method of claim 12, wherein the recipient device has an assigned unique address code and wherein said detecting step comprises detecting the unique address code.

19. The method of claim 18, further comprising the step of designating the message with the address code of the recipient device.

20. The method of claim 12, further comprising the step of assigning a time period to the message during which the message will be transmittable from said particular beacon to the recipient device.

21. The method of claim 20, further comprising the step of deleting the message from memory after the time period expires.

22. The method of claim 12, further comprising the step of deleting the message from memory after the message is transmitted to the recipient device.

23. The method of claim 13, further comprising the step of deleting the message from memory after the message is transmitted to the recipient device.

24. The method of claim 12, wherein said recipient device is a mobile phone.

25. The method of claim 12, wherein said plurality of beacons includes an information beacon.

26. The method of claim 12, wherein the wireless local area network is in communication with a mobile network.

27. The method of claim 12, wherein the wireless local area network is in communication with a global computer network.

28. A system for wirelessly communicating a message from a sender device to a recipient device in a local environment, comprising:

an information beacon positioned in the local environment, said information beacon having a memory and a transceiver and being capable of transmitting messages in an operating region associated with said beacon;

means for wirelessly transmitting the message from the sender device to said beacon;

means for storing the message in memory in said beacon;

means for detecting the presence of a recipient device when the recipient device is located in the operating region of said beacon; and

means for wirelessly transmitting the message from said beacon to the recipient device.

29. The system of claim 28, further comprising means for encrypting the message prior to storing the message in said beacon memory, and means for decrypting the message after the message is received by the recipient device.

30. The system of claim 28, wherein said means for wirelessly transmitting the message from the sender to said beacon and said means for transmitting the message from said beacon to the recipient device comprise Bluetooth technology.

31. The system of claim 28, wherein the recipient device has an assigned unique address code and wherein said means for detecting comprises means for detecting the unique address code.

32. The system of claim 28, wherein said recipient device is a mobile phone.

33. The system of claim 28, further comprising means for connecting said information beacon to a global computer network in communication with a service provider, and means for communicating a second message from the service provider to said information beacon by transmitting the second message over the global computer network.

34. A system for communicating a message from a sender device to a recipient device in a wireless local area network having a plurality of wireless beacons in communication

with each other and a host, with each beacon containing a memory, and a transceiver, and being operable in a corresponding operating region, comprising:

means for transmitting a message from the sender device to a specific one of said plurality of beacons currently serving the sender device;

a memory for storing the message received by said specific one of the plural beacons;

means for detecting the presence of the recipient device when the recipient device enters the operating range of a particular one of said plural beacons currently serving the recipient device;

means for retrieving the stored message by said particular beacon; and

means for wirelessly transmitting the retrieved message from said particular beacon to the recipient device.

35. The system of claim 34, wherein said means for wirelessly transmitting the message to said specific one beacon comprises means for transmitting the message to a second beacon in communication with said specific one beacon, and means for forwarding the message from said second beacon to said specific one beacon.

36. The system of claim 35, wherein said storing means comprises storing the message in the memory of said second beacon.

37. The system of claim 34, further comprising means for encrypting the message prior to storing the message in memory, and means for decrypting the message after the message is received by the recipient device.

38. The system of claim 34, wherein said detecting means further comprises means for transmitting a command from the recipient device to said particular beacon to transmit the stored message to the recipient device.

39. The system of claim 34, wherein said plurality of transceiver beacons and the recipient device employ Bluetooth technology.

40. The system of claim 34, wherein the recipient device has an assigned unique address code and wherein said detecting means comprises means for detecting the unique address code.

41. The system of claim 40, further comprising means for designating the message with the address code of the recipient device.

42. The system of claim 34, further comprising means for assigning a time period to the message during which the message will be transmittable from said particular beacon to the recipient device.

43. The system of claim 42, further comprising means for deleting the message from memory after the time period expires.

44. The system of claim 34, further comprising means for deleting the message from memory after the message is transmitted to the recipient device.

45. The system of claim 35, further comprising means for deleting the message from memory after the message is transmitted to the recipient device.

46. The system of claim 34, wherein said recipient device is a mobile phone.

47. The system of claim 34, wherein said plurality of beacons includes an information beacon.

48. The system of claim 34, wherein the wireless local area network is in communication with a mobile network.

49. The system of claim 34, wherein the wireless local area network is in communication with a global computer network.